6 November 1964

25X1A MEMORANDUM FOR: [redacted]

THROUGH: LB/SS

SUBJECT: Terms of Performance Incentives under Negotiation with
25X1A [redacted], on "Sine-Wave Testing Equipment"

1. Further specifications are provided on the performance incentives which we outlined in a meeting with the contractor on 30 October 1964. The two incentives have since been discussed in telephone conversations with
25X1A [redacted] Chief, EDLB/P&DS, and further modifications are reflected in this draft.

2. A statement of performance incentives as finally prepared and worded for the contract itself should be submitted to [redacted] and 25X1A
25X1A [redacted] for their agreement. Much of the technical detail was worked out over the telephone; consequently, [redacted] should have the 25X1A
benefit of seeing the final version in writing.

3. Proposed Incentives for CPIF Contract:

I. Resolution Limit

Spatial frequency capability of the instrument will be evaluated on three levels of performance:

228 l/mm	minimum acceptable 6%
600 l/mm	Target Goal 8%
1040 l/mm	Incentive Goal 10%

Test targets over 228 lmm will be GFE since such high resolution targets are not commercially available but will be available to NPIC either through an already existing contract or other sources (such as the Bureau of Standards).

II. Accuracy of MTF Measurement

The accuracy and precision of the equipment shall be demonstrated by the following procedure:

A microscope objective of high quality [redacted] Fluotar. 25X1A
for instance) is to be placed in a finite conjugate fixture having an adjustable aperture stop. This stop shall be circular and shall be adjusted to allow the lens to operate in a diffraction-limited mode. The diffraction limit shall be a lower frequency than the highest frequency on the testing target. The fixture shall also permit longitudinal focal shifts of 0, 1/4, 1/2, 3/4, and 1 wave of defocussing. (The transfer functions of a diffraction-limited lens under these conditions of focal shift can be precisely calculated).

The sine-wave testing equipment shall be used to measure the transfer function of the lens under these conditions of focal shift. Measurements shall be made for at least two different aperture stops. Comparison of measured and calculated transfer curves shall fall within:

1) 10% -- which will be designated target goal

2) 5% -- which will be incentive goal

[redacted] 25X1A
Development Branch, P&DS